Dump Truck			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

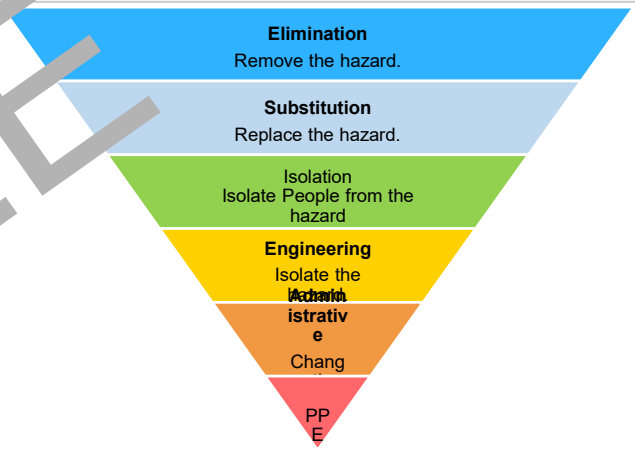
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS	
Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work *(2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Vehicle Procurement and Selection	• Dump trucks purchased that are not fit for purpose for uneven or sloping terrain (e.g. centre of gravity too high, no retarders, inadequate ground clearance) • Lack of engineering verification that trucks meet relevant Australian Standards and design requirements for intended load, gradient and ground conditions • No consideration of rollover protection structures (ROPS/FOPS) or inadequate cabin protection for off-highway use • Inadequate braking, steering and traction systems for gradients and loose or unstable surfaces • Missing or inadequate safety technologies (e.g. inclinometer, stability monitoring, load monitoring, collision avoidance, reversing cameras, proximity alarms) • Procurement decisions driven solely by cost without WHS risk criteria or consultation with operators and maintenance team • Incompatibility between dump specifications and haul road ramps, benches and loading equipment on site	High	• Establish a formal dump truck procurement procedure that mandates WHS Act 2011 duties for persons conducting a business or undertaking (PCBU), including specific consideration of uneven terrain and slope operation • Specify minimum technical and safety requirements in procurement documents (e.g. ROPS/FOPS to relevant Australian Standards, braking performance, maximum gradient capability, tyre type, suspension and traction aids suitable for site ground conditions) • Require OEM or competent engineer certification that trucks are suitable for the defined maximum gradient, load, speed and surface conditions expected on site • Include stability and rollover risk assessment as part of selection, considering centre of gravity, body design, load distribution and use on camber, windrows and stockpiles • Mandate inclusion of safety systems such as inclinometer with alarms, load weighing/overload protection, collision avoidance, reversing cameras, proximity detection and data logging of critical parameters • Ensure cab ergonomics, visibility, noise and vibration performance are considered to reduce operator fatigue and error on uneven terrain • Require suppliers to provide comprehensive technical documentation, operating limitations and maintenance requirements specific to off-road and uneven terrain use • Consult with operators, supervisors, maintenance personnel and HSRs during selection to confirm suitability for existing haul roads, ramps and dump points • Include contractual requirements for commissioning support, training and verification of safety systems prior to use • Implement a management of change (MOC) process so that any future changes to truck configuration (e.g. body extensions, tray liners, tyre changes) are risk assessed for stability and braking on uneven terrain	Medium
2. Planning, Design and Change Management for Uneven Terrain Operations	• Haul road, ramp and dump area designs not engineered for dump truck dimensions, axle loads and braking capacity • Inadequate geotechnical assessment of natural ground, batters, tip heads and stockpiles leading to collapse or subsidence under truck loads • Lack of defined maximum operating gradients, cross-falls and speed limits for different truck types and ground conditions • Uncontrolled changes to traffic routes, benches, ramps or tip areas without	High	• Develop and implement an engineering-based design standard for haul roads, ramps and dumping areas that considers truck specifications, maximum gradients, cross-falls, curves and stopping distances • Undertake geotechnical assessment of key uneven terrain areas, including tip heads, waste dumps, stockpiles and benches, with specified bearing capacity and stability factors of safety • Define and document maximum allowable operating gradients (longitudinal and cross-slope) for each dump truck type, based on OEM guidance and engineering assessment, and incorporate into site plans and procedures • Implement a formal management of change (MOC) process for any modification to routes, grades, dump locations or tipping sequences on uneven terrain, including risk assessment and consultation with affected workers • Establish and enforce road design criteria for width, camber, windrow height, visibility, signage, delineation and escape routes on slopes and uneven ground	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	formal risk assessment (poor management of change) • Inadequate separation between heavy vehicles, light vehicles and pedestrians on uneven or restricted areas • Insufficient run-off areas, safety berms, windrows and escape routes in areas with downgrade travel • Poor drainage design causing water accumulation, washouts, soft ground and bogging hazards • Inconsistent or unclear standards for construction and maintenance of haul roads and dump platforms • Inadequate controls for weather-related deterioration of uneven terrain (e.g. wet season, storms) impacting stability and traction		• Design traffic management plans that clearly segregate heavy vehicles from light vehicles and pedestrians, particularly in constrained or sloping areas, using physical barriers where reasonably practicable • Include drainage and erosion control measures in road and bench design to prevent water accumulation, rutting, washouts and undermining of road edges and tip heads • Set standards for construction, inspection and rectification of dump platforms, including pushing out and compaction of material, stand-off distances from edges and prohibition zones • Develop trigger-action response plans (TARPs) for adverse weather and ground conditions on uneven terrain, specifying when operations must be reduced, restricted or stopped • Periodically review and audit design assumptions against actual truck performance data, incident trends and near misses, and update design criteria accordingly	
3. Organisational Governance, WHS Management System and Legal Compliance	• Lack of clear organisational accountability for managing dump truck risks on uneven terrain • Inadequate integration of dump truck and mobile plant risks into the WHS management system and risk registers • Insufficient understanding of duties and due diligence obligations under the WHS Act 2011 among officers and managers • Policies and procedures not tailored to the specific risks of operating large haulage equipment on sloping or unstable ground • Poor consultation and communication with workers and HSRs on changes to routes, dump areas or operating rules • Inadequate incident reporting, investigation and corrective action processes for dump truck events such as near rollovers or loss of control • Failure to review and continuously improve controls following incidents, audits or legislative changes	High	• Define and document roles, responsibilities and accountabilities for managing mobile plant risks, including dump trucks on uneven terrain, from board level to frontline supervision • Integrate dump truck risks and controls into the organisation's WHS management system, including risk registers, objectives, KPIs and audit schedules • Provide due diligence training to officers and senior managers highlighting WHS Act 2011 requirements and specific high-risk issues associated with dump truck operations • Develop and maintain site-specific policies and procedures for haulage and dumping in uneven terrain, aligned with relevant WHS legislation, codes of practice and standards • Establish structured consultation mechanisms with workers and HSRs (e.g. regular safety committee meetings, toolbox talks) when planning or changing routes, dumps and work methods • Implement a robust incident and near-miss reporting system for dump truck events, encouraging reporting of stability concerns, ground failures and loss-of-control situations • Ensure incident investigations identify system and management causes (e.g. design, training, supervision, maintenance) rather than focusing solely on operator error • Regularly review the effectiveness of risk controls using data from incidents, inspections, monitoring technology and worker feedback, and update procedures and training as needed • Schedule periodic legal compliance reviews to ensure ongoing alignment with the WHS Act 2011, Regulations and any applicable mining or heavy vehicle legislation	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
4. Competency, Licensing and Training Systems	• Operators permitted to drive dump trucks on uneven terrain without verified competency or understanding of stability limits • Training programs that focus on basic operation only and do not address risk factors such as gradient, load placement, surface conditions and rollover potential • Lack of formal authorisation processes, including assessment on specific truck models and terrain types used on site • Insufficient training for supervisors, spotters and dispatch personnel on the risks and controls for uneven terrain operations • Failure to provide refresher training and competency reassessment following incidents, near misses or major route changes • Language, literacy or cultural barriers that prevent workers from understandin instructions, signage and dures • Limited training on mergency response actions i truck becomes unstable, bogged, edge	High	[redacted]	Medium
5. Supervision, Monitoring and Enforcement	• Inadequate frontline supervisio dump truck operations on terrain, leading to unsafe practices becoming normalised • Supervisors lacking skills or authority to challenge unsafe behaviour or stop work in high-risk conditions • Failure to monitor compliance with speed limits, gradient restrictions, designated routes and loading rules • Insufficient oversight of contractors who may use different standards or practices on site	High	[redacted]	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Under-reporting of hazards and near misses due to perceived production pressure or lack of follow-up • No real-time system to detect or respond to high-risk behaviours such as excessive speed on slopes or overloading on uneven ground		[redacted]	
6. Maintenance, Inspection and Asset Management	• Inadequate preventive maintenance of braking, steering and suspension systems critical for safe operation on slopes and rough ground • Failure to identify and correct defects affecting stability or traction (e.g. uneven tyre wear, faulty dampers, compromised ROPS/FOPS, steering play) • Inconsistent pre-use inspection systems, or reliance on paper checklis that are not reviewed or actioned • Poorly controlled ma enance changes (e.g. tyre e changes, body modifications, inst ation of liner that alter centre of grav or h g performance • Backlog of high-priority safety de ts that remain unrectified w s continue to operate on demanding terrain • Limited feedback loop between maintenance findings and engineering or operational controls (e.g. road design, speed limits)	igh	[redacted]	Medium
7. Site Infrastructure, Ground Conditions and Traffic Management	• Uneven or unstable ground conditions (ruts, potholes, soft spots, hidden voids) not systematically identified or controlled • Inadequate construction and maintenance of ramps, benches and	High	[redacted]	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	dump platforms causing loss of traction or truck instability • Road edges and tip heads not adequately protected or clearly defined, increasing rollover and over-the-edge risks • Poor traffic management on slopes and narrow sections, including head-on conflict or unsafe overtaking between heavy vehicles • Insufficient lighting and delineation on haul roads and dump areas used at night or in poor visibility • Lack of designated turnaround areas or safe zones for spotters and ancillary equipment on uneven ground • Unmanaged interaction between dump trucks and other mobile plant, pedestrians or light vehicles on rough or inclined routes		[redacted]	
8. Operational Procedures, Dispatch and Load Management	• Absence of clear operating procedures for using dump trucks on uneven or sloping terrain, leading to inconsistent practices across shifts • Poor dispatch control resulting in inappropriate truck allocations to routes with gradients exceeding their design capability • Uncontrolled loading practices (e.g. uneven loading, overloading, high centre-of-gravity loads) increasing rollover risk on uneven surfaces • Lack of defined rules around tipping and reversing near edges or on irregular ground profiles • Inadequate communication protocols between operators, spotters and loading equipment, especially in blind spots and undulating areas	High	[redacted]	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Production pressures driving operators to exceed speed limits, shortcut routes or disregard operating restrictions in rough terrain		[redacted]	
9. Human Factors, Fatigue and Health Management	• Operator fatigue from long shifts, night work or high vibration exposure on rough terrain reducing alertness and decision-making • Physical strain and discomfort from poor seating, cab ergonomics or whole-body vibration while traversing uneven ground • Stress and cognitive overload from complex routes, poor visibility and time pressure leading to errors in judgment • Use of drugs, alcohol or medications that impair driving ability not effectively managed • Insufficient consideration of individual factors (experience, fitness, medical conditions) when allocating operators to high-risk uneven terrain routes	High	[redacted]	Medium
10. Emergency Preparedness, Incident Response and Recovery	• Lack of planning for rollover, ground collapse, collision or bogging incidents involving dump trucks on uneven terrain • Emergency response procedures not adapted to remote or difficult-to-access locations on benches, ramps or dumps • Personnel untrained or ill-equipped to manage rescue and recovery operations involving large trucks on unstable or sloping ground • Communication failures or confusion about responsibilities during emergencies in off-road and uneven terrain areas	High	[redacted]	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
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	• Inadequate post-incident stabilisation of the area (e.g. unsecured edges, unstable material) exposing responders and investigators to secondary hazards		[redacted]	

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory
Work Health and Safety Act 2011
Work Health and Safety Regulations 2011
Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws
Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice
Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations
Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-practice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 2011
Work Health and Safety (National Uniform Legislation) Regulations 2011
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws
Codes of Practice NT: https://worksafe.nt.gov.au/forms-and-resources/codes-of-practice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (SA)
Legislation for SA: https://www.safework.sa.gov.au/resources/legislation
Codes of Practice for SA: https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs

Tasmania
Work Health and Safety Act 2012
Work Health and Safety (Transitional and Consequential Provisions) Act 2012
Work Health and Safety Regulations 2012
Work Health and Safety (Transitional) Regulations 2012
Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations
Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria
Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017
Legislation VIC: https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations
Codes of Practice VIC: https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

Western Australia
Work Health and Safety Act 2020
Work Health and Safety Regulations 2022
Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation
Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Safe Work Australia Links
Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation
Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work